

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An artificial disc prosthesis system comprising:
 - (a) a stabilizing element; and
 - (b) a scaffold assembly ~~adapted to removably retain the stabilizing element~~
~~when the artificial disc prosthesis system is disposed between two vertebrae, wherein the scaffold assembly is capable of accommodating stabilizing elements of a plurality of shapes or sizes comprising:~~
 - (i) a first base adapted to attach to a first vertebrae;
 - (ii) a second base adapted to attach to a second vertebrae;
and
 - (iii) at least one appendage removably attached to the first or the second base, such that the first base, the second base and the at least one appendage define a cage between the first and second vertebrae; wherein the stabilizing element is retained in the cage without being rigidly attached to the scaffold assembly.
2. (Original) The artificial disc prosthesis system of claim 1, wherein the stabilizing element is a disc prosthesis.
3. (Original) The artificial disc prosthesis system of claim 1, wherein the stabilizing element is a fusion prosthesis.
- 4-7. (Cancelled)
8. (Currently Amended) The artificial disc prosthesis system of claim 7~~1~~, wherein the scaffold assembly further comprises a first plate positioned above the stabilizing element and a second plate positioned below the stabilizing element, the second plate disposed opposite and in substantially parallel relation to the first plate, such that the stabilizing element is retained between the first and second plates. ~~attached to the first base~~

~~and a second plate attached to the second base, the second plate disposed opposite and in parallel relation to the first plate, such that the plates removably retain the disc prosthesis between the two plates when the artificial disc prosthesis system is disposed between two vertebrae.~~

9. (Original) The artificial disc prosthesis system of claim 8, wherein the first plate and the second plate have high friction outer surfaces.

10. (Original) The artificial disc prosthesis system of claim 8, wherein the first plate and the second plate have low friction outer surfaces.

11. (Original) The artificial disc prosthesis system of claim 1, wherein the stabilizing element is a disc prosthesis comprising a concave surface attached to a first prosthesis base by at least one flexible support and a complementary convex surface disposed on a second prosthesis base positioned opposite the first prosthesis base, wherein the concave surface and the convex surface form a rotating joint, and further wherein the at least one flexible support is capable of flexing to provide shock absorption when the artificial disc prosthesis system is disposed between two vertebra.

12. (Original) The artificial disc prosthesis system of claim 11, wherein the concave surface is attached to the first prosthesis base by two or more flexible supports.

13. (Original) The artificial disc prosthesis system of claim 1, wherein the scaffold assembly comprises a material selected from metal, ceramic and plastic.

14. (Original) The artificial disc prosthesis system of claim 1, wherein the scaffold assembly comprises a material selected from cobalt chrome or titanium.

15. (Currently Amended) A method for revising a stabilizing element, in the artificial disc prosthesis system of claim 1, the method comprising:

(a) removing a first stabilizing element from the cage; and an ~~intervertebral space, wherein the first stabilizing element was removably retained in the~~ intervertebral space by a scaffold assembly; and

(b) inserting a second stabilizing element into the cage, intervertebral space such that the second stabilizing element is removably retained in the intervertebral space by the scaffold assembly;

~~wherein the scaffold assembly remains in the intervertebral space during the removal of the first stabilizing element and the insertion of the second stabilizing element.~~

16. (Currently Amended) The method of claim 15, wherein the first and second stabilizing elements is a disc prosthesis and the second stabilizing element is a fusion prosthesis. ~~are independently selected from the group consisting of fusion prostheses and disc prostheses.~~

17. (Cancelled).

18. (Currently Amended) A disc prosthesis comprising:

- (a) a concave surface attached to a first base; and
- (b) a convex surface attached to a second base;

wherein the concave surface and the convex surface together form a rotating joint and further wherein at least one the of concave and convex surfaces is attached to its based through at least one flexible support capable of flexing to provide shock absorption when the artificial disc prosthesis is disposed between two vertebra.

19. (Original) The disc prosthesis of claim 18, wherein the concave surface is attached to the first base through at least one flexible support.

20. (Original) The disc prosthesis of claim 18, wherein the convex surface is attached to the second base through at least one flexible support.

21. (Original) A disc prosthesis comprising:

- (a) a first external cup;
- (b) a first internal cup comprising a first inner surface, the first internal cup mounted to the inside of the first external cup;
- (c) a second external cup; and
- (d) a second internal cup comprising a second inner surface complementary to the first inner surface, the second internal cup mounted to the inside of the second external cup;

wherein the first and second internal cups are disposed opposite one another such that the first and second inner surfaces contact one another to form a rotating joint.

22. (Original) The disc prosthesis of claim 21, wherein the first internal cup is centered within the first external cup and the second internal cup is centered within the second external cup.

23. (Original) The disc prosthesis of claim 21, wherein the first internal cup is offset from the center of the first external cup and the second internal cup is offset from the center of the second external cup.

24. (Original) The disc prosthesis of claim 21, wherein one of the internal cups has a smaller diameter than the other internal cup such that the smaller internal cup fits at least partially within the larger internal cup when the first and second inner surfaces are in contact.

25. (Original) The disc prosthesis of claim 21, wherein one of the external cups has a smaller diameter than the other external cup such that the smaller external cup fits at least partially within the larger external cup when the first and second inner surfaces are in contact.

26. (Original) The disc prosthesis of claim 21, wherein the first inner surface is mounted on at least one flexible support capable of flexing to provide shock absorption.

27. (Original) An artificial disc prosthesis system comprising:
(a) a stabilizing means for stabilizing two adjoining vertebrae in the absence of a vertebral disc; and
(b) a retaining means for removably retaining the stabilizing means when the artificial disc prosthesis system is disposed between two vertebrae, wherein the retaining means is capable of accommodating stabilizing means of a plurality of shapes and sizes.

28. (New) The artificial disc prosthesis of claim 1, wherein the scaffold assembly comprises at least two appendages attached to the first or the second base.

29. (New) The artificial disc prosthesis system of claim 1, wherein the first and second bases are ring-shaped.

30. (New) An artificial disc prosthesis system comprising:

- (a) a stabilizing element; and
- (b) a scaffold assembly comprising:
 - (i) a first base adapted to attach to a first vertebrae;
 - (ii) a second base adapted to attach to a second vertebra; and
 - (iii) one or more appendages extending into an intervertebral space,

such that the first base, the second base and the one or more appendages define a cage in the intervertebral space;

wherein the stabilizing element is retained in the cage without being rigidly attached to the scaffold assembly and further wherein the alignment of the one or more appendages may be adjusted to provide an opening into or out of which the stabilizing element may be inserted or extracted.

31. (New) A method for revising a stabilizing element in the artificial disc prosthesis system of claim 30, the method comprising:

- (a) removing a first stabilizing element from the cage; and
- (b) inserting a second stabilizing element into the cage.

32. (New) The method of claim 31, wherein the first stabilizing element is a disc prosthesis and the second stabilizing element is a fusion prosthesis.

33. (New) An artificial disc prosthesis system comprising:

- (a) a stabilizing element; and
- (b) a scaffold assembly comprising:
 - (i) a first base adapted to attach to a first vertebra;
 - (ii) a second base adapted to attach to a second vertebra; and
 - (iii) at least two appendages extending into an intervertebral space,

such that the first base, the second base and the at least two appendages define a cage in the intervertebral space;

wherein the stabilizing element is retained in the cage without being rigidly attached to the scaffold assembly.

34. (New) The artificial disc prosthesis system of claim 33, wherein the appendages comprise at least one buttress attached to each of the first and second bases.

35. (New) The artificial disc prosthesis system of claim 33, wherein the buttresses may be attached to the first or second bases at different positions or alignments.

36. (New) A method for revising a stabilizing element in the artificial disc prosthesis system of claim 33, the method comprising:

- (a) removing a first stabilizing element from the cage; and
- (b) inserting a second stabilizing element into the cage.

37. (New) The method of claim 36, wherein the first stabilizing element is a disc prosthesis and the second stabilizing element is a fusion prosthesis.

38. (New) An artificial disc prosthesis system comprising:

- (a) a stabilizing element; and
- (b) a scaffold assembly adapted to be attached to an endplate of at least one of two vertebrae that define an intervertebral space and to removably retain the stabilizing element in the intervertebral space; wherein the scaffold assembly is capable of accommodating stabilizing elements of a plurality of shapes and sizes.

39. (New) A method for revising a stabilizing element in the artificial disc prosthesis system of claim 38, the method comprising:

- (a) removing a first stabilizing element from the scaffold assembly; and
- (b) inserting a second stabilizing element into the scaffold assembly.

40. (New) The method of claim 39, wherein the first stabilizing element is a disc prosthesis and the second stabilizing element is a fusion prosthesis.

41. (New) The method of claim 39, wherein the first stabilizing element can be removed by an anterior or a lateral approach and the second stabilizing element can be inserted by an anterior or a lateral approach.

42. (New) A disc prosthesis comprising:

- (a) a first base comprising a floor and an outer wall;
- (b) a second base comprising a floor and an outer wall;

- (c) a concave surface supported on the floor of the first base; and
- (d) a convex surface supported on the floor of the second base;

wherein the concave surface and the convex surface together form a joint and further wherein at least one the of concave and convex surfaces is supported by at least one flexible support capable of flexing to provide shock absorption when the artificial disc prosthesis is disposed between two vertebra.